

CLAIMS

1 1. A track assembly for conveying a mobile device comprising:

2 a) a framework including a plurality of frame members, a plurality of axles fitted
3 to said frame members and to which axles a plurality of idler wheels are mounted, a drive
4 sprocket, and a first plate secured to said frame members;

5 b) a drive power source coupled to said drive sprocket;

6 c) an endless track trained around said drive sprocket and said plurality of idler
7 wheels; and

8 d) a second plate mounted to a chassis of the vehicle and aligned to support said
9 first plate such that said first and second plates move on one another, whereby said
10 framework supports the weight of said device and track assembly rotates relative to said
11 device.

1 2. A track assembly as set forth in claim 1 including bearing means fitted
2 between said first and second plates to facilitate relative motion.

1 3. A track assembly as set forth in claim 1 including a layer of a slippery bearing
2 material fitted between said first and second plates.

1 4. A track assembly as set forth in claim 1 including a plurality of bearings fitted
2 between said first and second plates.

1 5. A track assembly as set forth in claim 1 wherein said first and second plates are
2 concentrically aligned to said drive sprocket.

1 6. A track assembly as set forth in claim 1 wherein said first and second plates
2 exhibit arcuate mating surfaces and are resiliently biased relative to one another for
3 reciprocating motion between first and second limit conditions.

1 7. A track assembly as set forth in claim 6 wherein said first and second plates are

2 resiliently biased to a neutral condition midway between the extremes of relative motion.

1 8. A track assembly as set forth in claim 6 wherein a compressible member is
2 fitted between said first and second plates to resiliently bias said track assembly to a
3 neutral condition midway between the extremes of relative motion.

1 9. A track assembly as set forth in claim 1 wherein one of said first and second
2 plates includes a slot and wherein a stop member is arranged in said slot to limit rotation
3 of said first and second plates relative to one another.

1 10. A track assembly for conveying a mobile device comprising:

2 a) a framework including a plurality of frame members, a plurality of axles fitted
3 to said frame members and to which axles a plurality of idler wheels are mounted, a drive
4 sprocket, and an arcuate first plate secured to said frame members;

5 b) an arcuate second plate mounted to a chassis of the device and aligned to
6 support said first plate, such that said first and second plates pivot on one another, and
7 wherein said first and second plates are concentrically aligned to said drive sprocket;

8 b) bearing means fitted between said first and second plates to facilitate relative
9 motion;

10 c) a drive power source coupled to said drive sprocket; and

11 c) an endless track trained around said drive sprocket and said plurality of idler
12 wheels.

1 11. A track assembly as set forth in claim 10 wherein said first and second plates
2 are resiliently biased relative to one another for reciprocating motion between first and
3 second limit conditions.

1 12. A track assembly as set forth in claim 10 wherein one of said first and second
2 plates includes a slot and wherein a stop member is arranged in said slot to limit rotation

3 of said first and second plates relative to one another.

1 13. A track assembly for conveying a mobile device comprising:

2 a) a framework including a plurality of frame members, a plurality of axles fitted
3 to said frame members and to which axles a plurality of idler wheels are mounted, a drive
4 sprocket, and an arcuate first plate secured to said frame members;

5 b) an arcuate second plate mounted to a chassis of the device and aligned to
6 support said first plate, such that said first and second plates pivot on one another,
7 wherein said first and second plates are concentrically aligned to said drive sprocket, and
8 wherein said first and second plates are resiliently biased relative to one another for
9 reciprocating motion between first and second limit conditions determined by a stop
10 member fitted to aligned apertures at said first and second plates;

11 b) bearing means fitted between said first and second plates to facilitate relative
12 motion;

13 d) a drive power source coupled to said drive sprocket; and

14 c) an endless track trained around said drive sprocket and said plurality of idler
15 wheels.